

HOLDING DEVICE FOR NAIL VARNISH BOTTLES

The invention relates to a holding device for nail varnish bottles or similar.

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The varnishing of finger or toenails frequently proves to be laborious since the nail varnish bottle is typically placed at some distance from the nails to be varnished so that repeated to and fro movements with the colour-carrying brush 10 are required.

If the nail varnish bottle is clamped between thumb and forefinger to make it easier, the unavoidable tilting movements of the hand during varnishing sooner or later 15 result in the bottle being tipped too much and consequently, the nail varnish liquid runs out.

The document DE 78 02 416 U1 describes a holder for nail varnish bottles which comprises a base plate with at least 20 three springy tongues for receiving a nail varnish bottle and a support with a bearing surface for the finger of the nail to be varnished. The finger can thereby be placed firmly in the immediate vicinity of the nail varnish bottle and varnished. However, the proposed holder requires a stable 25 standing area and is impractical to transport because of its size so that it is generally only used at a fixed location.

This is where the invention begins. It is the object of the invention as characterised in the claims to provide a small 30 and light holding device for nail varnish bottles or similar which reliably avoids any spillage of nail varnish liquid when varnishing finger or toenails.

The object is achieved according to the invention by the holding device according to claim 1 or claim 4. Further advantageous embodiments of the invention are deduced from the dependent claims.

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According to a first aspect of the invention, a holding device for nail varnish bottles or similar comprises two circular arcs for clamping the holding device between two fingers of one hand and a mounting device for mounting a nail
10 varnish bottle arranged between the circular arcs. The mounting device is suspended from both circular arcs. Circular arc is understood in this case as a part of a circular ring which preferably has a central angle of about 60° to about 120° and especially substantially forms a semi-
15 circular ring having a central angle of about 90°.

In a first aspect, the invention is consequently based on the idea of attaching the nail varnish bottle to the hand with the fingernails to be varnished so that it is freely
20 suspended. As a result of the pressure exerted on the circular arcs by the two fingers, the holding device with the nail varnish bottle is held securely. At the same time, the suspension of the mounting device from the circular arcs ensures that the nail varnish bottle hangs vertically
25 downwards in the mounting device even when the hand executes strong tilting movements. It is understood that the nail varnish bottle clamped between two fingers can easily be used for varnishing the toenails.

30 In a preferred embodiment, the mounting device is connected to the two circular arcs by means of two connecting pins. The connecting pins are provided with small balls at their end which are inserted through two associated holes in the

circular arcs. This simply ensures that the mounting device can pivot freely in all directions.

In another, likewise preferred embodiment, the mounting device is connected to the two circular arcs by a screw and a sleeve nut. The screw and the sleeve nut are each inserted through a hole in the circular arcs and screwed together.

In a second aspect of the invention, a holding device for nail varnish bottles or similar comprises a lockable strip for fixing the holding device to a hand or foot joint and a mounting device for mounting a nail varnish bottle, which is affixed to the strip. The mounting device is thereby fixed to the strip in a suspended manner.

This aspect of the invention is also based on the basic idea of attaching the nail varnish bottle so that it is suspended freely in the immediate vicinity of the nails to be varnished. The strip can be bound around a hand joint for varnishing the fingernails or around a foot joint for varnishing the toenails. For this purpose the strip is appropriately provided with a Velcro closure or another detachable closure. The strip is preferably embodied as elastic so that it can be used equally well by a plurality of users of different size.

After fixing to a hand or foot joint, the holding device with the nail varnish bottle is securely held in this aspect of the invention. The suspension of the mounting device from the strip also again ensures the vertical stability of the nail varnish bottle so that unintentional spillage of liquid during varnishing is almost eliminated.

In an advantageous further development, the strip has a flexible reinforcement to which the mounting device is fixed. The flexible reinforcement can be formed, for example, by a flexible plastic film or a flexible plastic lamina.

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In an embodiment which is easy to produce and which provides free pivotability of the mounting device, the mounting device is fixed to the strip by means of a connecting pin. For this purpose, the connecting pin is advantageously provided with a small ball at its end, which is inserted through an associated hole in the reinforcement and thus forms a ball joint which can pivot in all directions.

10 In both aspects of the invention, the mounting device in a preferred embodiment comprises a ring element with an internal thread into which the bottle neck of a nail varnish bottle or similar can be screwed. The ring element preferably tapers conically and thus allows bottles having different bottle neck diameters to be screwed in.

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Alternatively, the mounting device can have a spring element into which the bottle neck of a nail varnish bottle or similar can be clamped.

25 The mounting device is advantageously screwed, stuck or soldered to the connecting pin(s) or the sleeve nut.

30 The invention is explained in detail hereinafter with reference to exemplary embodiments in connection with the drawings. Only the elements important for the understanding of the invention are shown.

In the figures:

Fig. 1 is a schematic diagram of a holding device for nail varnish bottles according to a first exemplary embodiment of the invention in an exploded view,

5 Fig. 2 shows the assembled holding device from Fig. 1,

Fig. 3 is a holding device for nail varnish bottles according to another exemplary embodiment of the invention before joining together the individual parts,
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Fig. 4 is a schematic diagram of a holding device for nail varnish bottles according to another exemplary embodiment of the invention before joining together the strip and the mounting device and
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Fig. 5 shows the holding device from Fig. 4 which has been joined together and closed.

A first exemplary embodiment of the invention is shown in
20 Figures 1 and 2. For the sake of clarity Fig. 1 shows the holding device 10 in an exploded view whilst Fig. 2 shows the holding device joined together and ready for use.

The holding device 10 comprises two semi-circular rings 12
25 made of plastic or metal which are connected to a conical ring element 16 by means of two connecting pins 14. The connecting pins 14 are provided at each end with a small ball 18 whereby they are mounted in a corresponding hole 20 in the semicircular ring 12 (Fig. 2) and thus form a ball joint for
30 the ring element 16.

The conical ring element 16 has an internal thread 22 which is merely indicated in Fig. 1, into which the bottle neck of a nail varnish bottle 24 can be screwed. As a result of the

tapering shape of the ring element 16, a plurality of bottles with different bottle neck diameters can be accommodated, their external thread engaging with the internal thread 22 at a specific height.

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For varnishing finger or toe nails, the holding device 10 is clamped between two fingers of a hand after screwing the opened nail varnish bottle 24 into the ring element 16 with its semicircular rings 12. The fingernails of the holding
10 hand or toenails can easily be varnished with the other hand. As a result of the ring element 16 being pivotally connected to the semicircular rings 12 via the ball joints 14, 18, and the own weight of the nail varnish bottle 24, it is ensured that the bottle itself hangs perpendicularly downwards even
15 when the hand makes strong tilting movements so that there is no risk of nail varnish liquid being spilled.

An alternative embodiment of the holding device 50 is shown in Fig. 3 not yet assembled. The holding device 50 contains
20 two semicircular rings 52 which are connected to one another by means of a screw 54 and a sleeve nut 56 in a suspended manner. The mounting device is formed by a spring element 58 in the manner of a bolt locking assembly known from model building in which the bottle neck of a nail varnish bottle
25 can be clamped. The spring element 58 can be fixed by screwing, sticking or soldering to the sleeve nut 56.

Figures 4 and 5 show another exemplary embodiment of the invention. The holding device 30 comprises an elastic strip
30 32 with a reinforcement 34 made of flexible plastic attached in the center. In this exemplary embodiment, the mounting device for nail varnish bottles 24 is formed by a conically tapering ring element 36 which is fixed to the reinforcement 34 of the strip 32 by means of a connecting pin 40 provided

with a small ball 38. For this purpose the plastic reinforcement 34 has a small hole 42 which can receive the ball 38 of the connecting pin 40.

- 5 A Velcro closure 44 is provided for fixing the elastic strip on a hand or foot joint. Figure 5 shows the ready-mounted and closed holding device 30 as bound to a hand or foot joint for example. As in the first exemplary embodiment, the nail varnish bottle 24 is screwed into an internal thread of the
10 ring element 36 not shown in the figures. Both hands are then free and the nail varnish is located near for working. The freely pivotal suspension of the nail varnish bottle on the strip 32 keeps this in a substantially vertical position so that the risk of spillage of nail varnish liquid is also
15 minimized here.